



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Minoru Yoshida et al.
 Serial No. : 10/505,380
 Filed : August 20, 2004
 Title : HISTONE DEACETYLASE INHIBITORS AND METHODS FOR PRODUCING
 THE SAME

MAIL STOP AMENDMENT
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement;
2. Form PTO-1449;
3. Copies of Cited References;
4. Copy of the translation of the International Search Report;
5. Copy of the translation of the International Preliminary Examination Report; and
6. A Return Postcard.

Please date stamp and return the enclosed postcard.

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Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Minoru Yoshida et al. Art Unit : 1615
Serial No. : 10/505,380 Examiner : Unknown
Filed : August 20, 2004
Title : HISTONE DEACETYLASE INHIBITORS AND METHODS FOR PRODUCING THE SAME

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Copies of the references listed on the attached form PTO-1449 are enclosed.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: July 12, 2005

A handwritten signature of Mark S. Ellinger, Ph.D.

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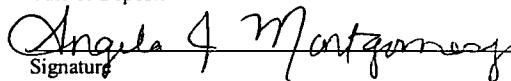
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Sheet 1 of 3

Substitute Form PTO-1449 (Modified) JUL 14 2005 Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.13(b))		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 18115-002US1	Application No. 10/505,380
		Applicant	Minoru Yoshida et al.	
		Filing Date	August 20, 2004	Group Art Unit 1615

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	2002/0120099 A1	08/29/2002	Nishino et al.			

Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							Yes No
	AB	2 317 003	08/28/2001	Canada			
	AC	1 174 438 A1	01/23/2002	EPO			
	AD	2000256397	09/19/2000	Japan			Abstract
	AE	2001316283	11/13/2001	Japan			Abstract
	AF	2002527449T	08/27/2002	Japan			Abstract
	AG	2003505417T	02/12/2003	Japan			Abstract
	AH	WO 00/21979	04/20/2000	WIPO			
	AI	WO 00/52033	09/08/2000	WIPO			Abstract
	AJ	WO 01/07042	02/01/2001	WIPO			

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AK	Bernhard et al., "Interaction between dexamethasone and butyrate in apoptosis induction: non-additive in thymocytes and synergistic in a T cell-derived leukemia cell line," <u>Cell Death and Differentiation</u> , 1999, 6(7):609-617
	AL	Boivin et al., "Antineoplastic action of 5-aza-2'-deoxycytidine and phenylbutyrate on human lung carcinoma cells," <u>Anti-Cancer Drugs</u> , 2002, 13(8):869-874
	AM	Cameron et al., "Synergy of demethylation and histone deacetylase inhibition in the re-expression of genes silenced in cancer," <u>Nature Genetics</u> , 1999, 21(1):103-107
	AN	Chen et al., "Reactivation of silenced, virally transduced genes by inhibitors of histone deacetylase," <u>Proc. Natl. Acad. Sci. USA</u> , 1997, 94:5798-5803
	AO	Coffey et al., "The Histone Deacetylase Inhibitor, CBHA, Inhibits Growth of Human Neuroblastoma Xenografts <i>in Vivo</i> , Alone and Synergistically with <i>All-Trans</i> Retinoic Acid," <u>Cancer Research</u> , 2001, 61(9):3591-3594
	AP	Colletti et al., "Broad Spectrum Antiprotozoal Agents that Inhibit Histone Deacetylase: Structure-Activity Relationships of Apicidin. Part 2," <u>Bioorganic & Medicinal Chemistry Letters</u> , 2001, 11:113-117
	AQ	Colletti et al., "Design and synthesis of histone deacetylase inhibitors: the development of apicidin transition state analogs," <u>Tetrahedron Letters</u> , 2000, 41:7837-7841
	AR	Darkin-Rattray et al., "Apicidin: A novel antiprotozoal agent that inhibits parasite histone deacetylase," <u>Proc. Natl. Acad. Sci. USA</u> , 1996, 93:13143-13147

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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Sheet 2 of 3

Substitute Form PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 18115-002US1	Application No. 10/505,380
Information Disclosure Statement by Applicant <small>(Use several sheets if necessary)</small>		Applicant Minoru Yoshida et al.		
		Filing Date August 20, 2004	Group Art Unit 1615	
Other Documents (include Author, Title, Date, and Place of Publication)				

Examiner Initial	Desig. ID	Document
	AS	Dhordain et al., "Corepressor SMRT binds the BTB/POZ repressing domain of the LAZ3/BCL6 oncoprotein," <i>Proc. Natl. Acad. Sci. USA</i> , 1997, 94:10762-10767
	AT	Dion et al., "Amplification of Recombinant Adenoviral Transgene Products Occurs by Inhibition of Histone Deacetylase," <i>Virology</i> , 1997, 231:201-209
	AU	Ferrara et al., "Histone Deacetylase-targeted Treatment Restores Retinoic Acid Signaling and Differentiation in Acute Myeloid Leukemia," <i>Cancer Research</i> , 2001, 61(1):2-7
	AV	Finnin et al., "Structures of a histone deacetylase homologue bound to the TSA and SAHA inhibitors," <i>Nature</i> , 1999, 401:188-193
	AW	Fischle et al., "A New Family of Human Histone Deacetylases Related to <i>Saccharomyces cerevisiae</i> , HDA1p," <i>J. Biol. Chem.</i> , 1999, 274(17):11713-11720
	AX	Furumai et al., "Potent histone deacetylase inhibitors built from trichostatin A and cyclic tetrapeptide antibiotics including trapoxin," <i>Proc. Natl. Acad. Sci. USA</i> , 2001, 98(1):87-92
	AY	Furumai et al., "FK228 (Depsi peptide) as a Natural Prodrug That Inhibits Class I Histone Deacetylases," <i>Cancer Research</i> , 2002, 62(17):4916-4921
	AZ	Göttlicher et al., "Valproic acid defines a novel class of HDAC inhibitors inducing differentiation of transformed cells," <i>EMBO J.</i> , 2001, 20(24):6969-6978
	AAA	Grignani et al., "Fusion proteins of the retinoic acid receptor- α recruit histone deacetylase in promyelocytic leukaemia," <i>Nature</i> , 1998, 391:815-818
	ABB	He et al., "Distinct interactions of PML-RAR α and PLZF-RAR α with co-repressors determine differential responses to RA in APL," <i>Nature Genetics</i> , 1998, 18:126-134
	ACC	Hoshikawa et al., "Expression of Differentiation-related Markers in Teratocarcinoma Cells via Histone Hyperacetylation by Trichostatin A," <i>Agric. Biol. Chem.</i> , 1991, 55(6):1491-1495
	ADD	Hubbert et al., "HDAC6 is a microtubule-associated deacetylase," <i>Nature</i> , 2002, 417:455-458
	AEE	Inokoshi et al., "Neuronal Differentiation of Neuro 2a Cells by Inhibitors of Cell Cycle Progression, Trichostatin A and Butyrolactone I," <i>Biochem. Biophys. Res. Comm.</i> , 1999, 256(2):372-376
	AFF	Ito et al., "p300/CBP-mediated p53 acetylation is commonly induced by p53-activating agents and inhibited by MDM2," <i>EMBO J.</i> , 2001, 20(6):1331-1340
	AGG	Juan et al., "Histone Deacetylases Specifically Down-regulate p53-dependent Gene Activation," <i>J. Biol. Chem.</i> , 2000, 275(27):20436-20443
	AHH	Kim et al., "Oxamflatin is a novel antitumor compound that inhibits mammalian histone deacetylase," <i>Oncogene</i> , 1999, 18:2461-2470
	AII	Kim et al., "Histone deacetylases induce angiogenesis by negative regulation of tumor suppressor genes," <i>Nature Medicine</i> , 2001, 7(4):437-443
	AJJ	Komatsu et al., "Cyclic Hydroxamic-acid-containing Peptide 31, a Potent Synthetic Histone Deacetylase Inhibitor with Antitumor Activity," <i>Cancer Research</i> , 2001, 61(11):4459-4466
	AKK	Kwon et al., "Histone Deacetylase Inhibitor FK228 Inhibits Tumor Angiogenesis," <i>Int. J. Cancer</i> , 2002, 97:290-296
	ALL	Li et al., "Causal Relationship between the Loss of RUNX3 Expression and Gastric Cancer," <i>Cell</i> , 2002, 109(1):113-124
	AMM	Lin et al., "Role of the histone deacetylase complex in acute promyelocytic leukaemia," <i>Nature</i> , 1998, 391:811-814
	ANN	Marks et al., "Histone Deacetylase Inhibitors: Inducers of Differentiation or Apoptosis of Transformed Cells," <i>J. Natl. Cancer Inst.</i> , 2000, 92:1210-1216

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Date Considered

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Sheet 3 of 3

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Information Disclosure Statement by Applicant <small>(Use several sheets if necessary)</small>		Applicant Minoru Yoshida et al.		
		Filing Date August 20, 2004	Group Art Unit 1615	

JUL 14 2005

(37 CFR §1.88(b))

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AOO	Matsuyama et al., "In vivo destabilization of dynamic microtubules by HDAC6-mediated deacetylation," <i>EMBO J.</i> , 2002, 21(24):6820-6831
	APP	Meinke et al., "Synthesis of side chain modified apicidin derivatives: potent mechanism-based histone deacetylase inhibitors," <i>Tetrahedron Letters</i> , 2000, 41:7831-7835
	AQQ	McKinsey et al., "Signal-dependent nuclear export of a histone deacetylase regulates muscle differentiation," <i>Nature</i> , 2000, 408:106-111
	ARR	Minucci et al., "A histone deacetylase inhibitor potentiates retinoid receptor action in embryonal carcinoma cells," <i>Proc. Natl. Acad. Sci. USA</i> , 1997, 94(21):11295-11300
	ASS	Munster et al., "The Histone Deacetylase Inhibitor Suberoylanilide Hydroxamic Acid Induces Differentiation of Human Breast Cancer Cells," <i>Cancer Research</i> , 2001, 61(23):8492-8497
	ATT	Nakajima et al., "FR901228, a Potent Antitumor Antibiotic, Is a Novel Histone Deacetylase Inhibitor," <i>Exp. Cell Res.</i> , 1998, 241(1):126-133
	AUU	Nan et al., "Transcriptional repression by the methyl-CpG-binding protein MeCP2 involves a histone deacetylase complex," <i>Nature</i> , 1998, 393(6683):386-389
	AVV	Petti et al., "Complete remission through blast cell differentiation in <i>PLZF/RAR</i> α -positive acute promyelocytic leukemia: in vitro and in vivo studies," <i>Blood</i> , 2002, 100(3):1065-1067
	AWW	Primeau et al., "Synergistic Antineoplastic Action of DNA Methylation Inhibitor 5-AZA-2'-Deoxycytidine and Histone Deacetylase Inhibitor Depsiteptide on Human Breast Carcinoma Cells," <i>Int. J. Cancer</i> , 2003, 103:177-184
	AXX	Saito et al., "A synthetic inhibitor of histone deacetylase, MS-27-275, with marked <i>in vivo</i> antitumor activity against human tumors," <i>Proc. Natl. Acad. Sci. USA</i> , 1999, 96(8):4592-4597
	AYY	Verdel and Khochbin, "Identification of a New Family of Higher Eukaryotic Histone Deacetylases," <i>J. Biol. Chem.</i> , 1999, 274(4):2440-2445
	AZZ	Verdel et al., "Active maintenance of mHDA2/mHDAC6 histone-deacetylase in the cytoplasm," <i>Current Biology</i> , 2000, 10:1-3
	AAAA	Wang et al., "Inhibitors of Histone Deacetylase Relieve ETO-mediated Repression and Induce Differentiation of AML1-ETO Leukemia Cells," <i>Cancer Research</i> , 1999, 59(12):2766-2769
	ABBB	Yang et al., "Isolation and Characterization of cDNAs Corresponding to an Additional Member of the Human Histone Deacetylase Gene Family," <i>J. Biol. Chem.</i> , 1997, 272(44):28001-28007
	ACCC	Yoshida et al., "Potent and Specific Inhibition of Mammalian Histone Deacetylase Both <i>in Vivo</i> and <i>in Vitro</i> by Trichostatin A," <i>J. Biol. Chem.</i> , 1990, 265(28):17174-17179
	ADDD	Yoshida et al., "Trichostatin A and trapoxin: novel chemical probes for the role of histone acetylation in chromatin structure and function," <i>BioEssays</i> , 1995, 17(5):423-430
	AEEE	Yoshida et al., "Effects of Trichostatins on Differentiation of Murine Erythroleukemia Cells," <i>Cancer Research</i> , 1987, 47(14):3688-3691

Examiner Signature /Thomas Heard/	Date Considered 02/26/2008
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